CLAIMS

What is claimed is:

1. A process for removing metals from an aqueous solution comprising the steps of:

contacting an aqueous solution with at least one neutralizing agent and at least one precipitating agent that preferentially precipitates metals from the aqueous solution.

2. The process of claim 1, wherein the at least one neutralizing agent is selected from the group consisting of limestone, marble, calcium carbonate, calcite, dolostone and dolomite.

3. The process of claim 1, wherein the at least one precipitating agent is selected from the group consisting of sandstone, quartz, siltstone, quartzarenite, arkose, shale, feldspar, illite, gravel, granite, basalt, conglomerate, schist, slate, gnesis, diorite, gabbro, and rhyolite.

4. The process of claim 1, wherein the metals are selected from the group consisting of iron, iron oxide, silica, aluminum oxide, magnesium oxide, copper oxide, chromium oxide, nickel oxide, lead oxide, zinc, zinc oxide, aluminum, magnesium, cadmium, copper, chromium, nickel, lead.

5. The process of claim 1, wherein said step of contacting an aqueous solution involves adding the at least one neutralizing agent and at least one precipitating agent to a natural stream of water.

6. The process of claim 6, wherein the at least one neutralizing agent and at least one precipitating agent are added as large blocks so that the water passes over and around the blocks.

7. The process of claim 6, wherein the at least one neutralizing agent and at least one precipitating agent are added in gravel form.

8. The process of claim 1, wherein said step of contacting an aqueous solution involves passing the aqueous solution through a pipe that includes both the at least one neutralizing agent and the at least one precipitating agent.

9. The process of claim 9, wherein the at least one neutralizing agent and the at least one precipitating agent are provided in the pipe as a mixture of pieces of the at least one neutralizing agent and the at least one precipitating agent.

10. The process of claim 9, wherein the at least one neutralizing agent and the at least one precipitating agent are provided in the pipe as alternating rings.

11. The process of claim 9, wherein said step of contacting an aqueous solution includes utilizing pump to urge the aqueous solution through the pipe.